### => d his ful

(FILE 'HOME' ENTERED AT 14:15:36 ON 22 JUL 2005)

```
FILE 'REGISTRY' ENTERED AT 14:15:41 ON 22 JUL 2005
L1
               STR
              0 SEA SSS SAM L1
L2
L3
               SCR 2043
              O SEA SSS SAM L3 AND L1
L4
L5
              O SEA SSS FUL L3 AND L1
               D QUE
             1 SEA ABB=ON PLU=ON 544706-97-0
               D SCA
L7
               STR
L8
             0 SEA SSS SAM L7
L9
            O SEA SUB=L6 SSS SAM L7
L10
               STR L7
             O SEA SUB=L6 SSS SAM L10
L11
             1 SEA SSS SAM L3 AND L10
               D SCA
L13
           105 SEA SSS FUL L3 AND L10
             O SEA ABB=ON PLU=ON L6 AND L13
L14
L15
               STR L1
L16
             0 SEA SSS SAM L3 AND L15
             7 SEA SSS FUL L3 AND L15
L17
L18
             1 SEA ABB=ON PLU=ON L17 AND L6
               D SCA L17
               STR
L19
             3 SEA SUB=L17 SSS FUL L19
L20
               D SCA
     FILE 'HCAPLUS' ENTERED AT 15:05:00 ON 22 JUL 2005
      4 SEA ABB=ON PLU=ON L20
L21
     FILE 'STNGUIDE' ENTERED AT 15:05:29 ON 22 JUL 2005
     FILE 'REGISTRY' ENTERED AT 15:08:06 ON 22 JUL 2005
L22
              STR
L23
             0 SEA SSS SAM L22
L24
             0 SEA SSS SAM L3 AND L22
L25
             3 SEA SSS FUL L3 AND L22
               D SCA
     FILE 'HCAPLUS' ENTERED AT 15:09:40 ON 22 JUL 2005
L26
      5 SEA ABB=ON PLU=ON L25
     FILE 'REGISTRY' ENTERED AT 15:11:02 ON 22 JUL 2005
L27
              STR L22
            13 SEA SSS FUL L3 AND L27
L28
     FILE 'HCAPLUS' ENTERED AT 15:11:33 ON 22 JUL 2005
            21 SEA ABB=ON PLU=ON L28
L29
     FILE 'REGISTRY' ENTERED AT 15:11:48 ON 22 JUL 2005
L30
               STR
L31
             O SEA SSS FUL L3 AND L30
               D QUE
L32
               STR L30
```

```
L33
              0 SEA SSS SAM L32
             O SEA SSS SAM L3 AND L32
L34
L35
             49 SEA SSS FUL L3 AND L32
L36
                STR L32
              3 SEA SSS SAM L3 AND L36
L37
            279 SEA SSS FUL L3 AND L36
L38
            160 SEA ABB=ON PLU=ON L38 AND NC<4
L39
L40
              1 SEA ABB=ON PLU=ON
                                    OXIRANE/CN
                E POLYETHYLENE GLYCOL/CN
              1 SEA ABB=ON PLU=ON
                                   "POLYETHYLENE GLYCOL"/CN
T.41
L*** DEL
           3337 S POLYPROPYLENE GLYCOL
              1 SEA ABB=ON PLU=ON POLYPROPYLENE GLYCOL/CN
L42
              3 SEA ABB=ON PLU=ON (L40 OR L41 OR L42)
L43
                SEL RN
L44
          44461 SEA ABB=ON PLU=ON (25322-68-3/CRN OR 25322-69-4/CRN OR
                75-21-8/CRN)
             58 SEA ABB=ON PLU=ON L44 AND L38
T.45
L46
            24 SEA ABB=ON
                           PLU=ON L39 AND L44
                                   L38 NOT IDS/CI
L47
            274 SEA ABB=ON
                           PLU=ON
L48
             67 SEA ABB=ON PLU=ON
                                   L47 AND NC<3
L49
              1 SEA ABB=ON PLU=ON
                                   L48 AND L44
                D SCA
     FILE 'HCAPLUS' ENTERED AT 16:03:39 ON 22 JUL 2005
L50
             1 SEA ABB=ON PLU=ON L49
                D SCA TI
     FILE 'REGISTRY' ENTERED AT 16:03:58 ON 22 JUL 2005
L51
              7 SEA ABB=ON PLU=ON L47 AND NC=1
                D SCA
L52
              2 SEA ABB=ON
                           PLU=ON
                                   L51 AND "POLY(OXY-"?/CN
                D SCA
L53
              3 SEA ABB=ON PLU=ON L49 OR L52
     FILE 'HCAPLUS' ENTERED AT 16:05:42 ON 22 JUL 2005
     FILE 'REGISTRY' ENTERED AT 16:08:15 ON 22 JUL 2005
L54
                STR
L55
            1 SEA SSS SAM L54
             8 SEA SSS SAM L3 AND L54
L56
            703 SEA SSS FUL L3 AND L54
L57
            13 SEA ABB=ON PLU=ON L57 AND L44
L58
             2 SEA ABB=ON
                          PLU=ON L58 AND NC=2
L59
                D SCA
                                   L57 NOT IDS/CI
L60
            668 SEA ABB=ON
                           PLU=ON
            310 SEA ABB=ON PLU=ON L60 AND NC=1
L61
     FILE 'HCAPLUS' ENTERED AT 16:15:17 ON 22 JUL 2005
L62
              2 SEA ABB=ON PLU=ON (L59 OR L61) (L) PROTEIN
               D SCA TI
               D L19
    FILE 'REGISTRY' ENTERED AT 16:20:13 ON 22 JUL 2005
    FILE 'HCAPLUS' ENTERED AT 16:20:17 ON 22 JUL 2005
               D L27
```

FILE 'REGISTRY' ENTERED AT 16:22:29 ON 22 JUL 2005

D OUE L31

L63		STR	L30		
L64		0 SEA	SSS FUL	L3 AND	) L63
		D Q	UE L31		
		D S	CA L53		•
L65		STR	L1		
L66		ll SEA	SSS FUL	L3 AND	L65
L67		0 SEA	ABB=ON	PLU=ON	L66 AND L44
L68	2	0 SEA	ABB=ON	PLU=ON	I L17 OR L25 OR L28 OR L31 OR L53
	FILE 'HC	APLUS'	ENTERED	AT 16:2	28:02 ON 22 JUL 2005
L69	2	5 SEA	ABB=ON	PLU=ON	L L68
L70_	V. Year on	2 SEA	ABB=ON	PLU=ON	(L59 OR L62)(L)PROTEIN
171		7 SEA	ABB=ON	PLU=ON	L69 OR L70

### FILE HOME

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2005 HIGHEST RN 856430-35-8 DICTIONARY FILE UPDATES: 21 JUL 2005 HIGHEST RN 856430-35-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

## FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Jul 2005 VOL 143 ISS 5 FILE LAST UPDATED: 21 Jul 2005 (20050721/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> d que

L3SCR 2043 L15

 $NH \sim C = 0$ C<del>≔</del>O o~~ c≔=o @16 17 @18 @19 20 @21 @22 23

Ak~0~G3~G4~G5~G6~CH=0 3 4 5 6 7 8 9 10

REP G3 = (2-4) CH2 VAR G4=16/18-5 19-7/21-5 22-7 VAR G5=O/NH REP G6=(2-8) CH2 NODE ATTRIBUTES: CONNECT IS E2 RC AT DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 7 SEA FILE=REGISTRY SSS FUL L3 AND L15 L22 STR

O CH~ G1~ NH~ C~ CH2 CH2 1 2 3 4 5 6 7

0

REP G1 = (2-8) CH2 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L25 3 SEA FILE=REGISTRY SSS FUL L3 AND L22

```
L27
                 STR
               8
               0
 O == CH~ G1~ NH~ C~ CH
 1 2 3 4
 REP G1=(2-8) CH2
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED
 GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 7
 STEREO ATTRIBUTES: NONE
L28
              13 SEA FILE=REGISTRY SSS FUL L3 AND L27
L30
                 STR
                      11
           10
            0
                       OH
                                                   CH2@14
                                                           Ak @15
                                       CH~G2
                                      @12 13
 Ak~O~G4~C~NH~G3~CH~G1~OH
                     7 8 9
 1 2 3 4 5 6
VAR G1=12/14
 VAR G2=15/PH
REP G3 = (2-8) CH2
REP G4 = (2-4) CH2
NODE ATTRIBUTES:
 CONNECT IS E2 RC AT
                       1
 CONNECT IS E1 RC AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15
STEREO ATTRIBUTES: NONE
L31
               O SEA FILE=REGISTRY SSS FUL L3 AND L30
L36
                 STR
                                      11
              CH2 @14
                      Ak @15
                                       OH
 CH~G2
@12 13
                               0\sim G3\sim CH\sim G1\sim OH
                              16 6
                                     78
VAR G1=12/14
```

VAR G1=12/14 VAR G2=15/PH REP G3=(2-8) CH2 NODE ATTRIBUTES: CONNECT IS E1 RC AT 15 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

```
GRAPH ATTRIBUTES:
```

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L38 279 SEA FILE=REGISTRY SS	SS FUL	L3	AND L	36
------------------------------	--------	----	-------	----

44461 SEA FILE=REGISTRY ABB=ON PLU=ON (25322-68-3/CRN OR 25322-69-4

/CRN OR 75-21-8/CRN)

274 SEA FILE=REGISTRY ABB=ON PLU=ON L38 NOT IDS/CI L47 67 SEA FILE=REGISTRY ABB=ON PLU=ON L47 AND NC<3 1 SEA FILE=REGISTRY ABB=ON PLU=ON L48 AND L44 L49

7 SEA FILE=REGISTRY ABB=ON PLU=ON L47 AND NC=1 L51 2 SEA FILE=REGISTRY ABB=ON PLU=ON L51 AND "POLY(OXY-"?/CN L52

3 SEA FILE=REGISTRY ABB=ON PLU=ON L49 OR L52 L53

STR L54

C<del>≔</del>O NH√ C = O 0-√- C<u>===</u> 0 O → G4 → G3 → G2 → G1 → CH2 NH 7 6 1 2 3 4 5 **@**8 9 @10 @11 12 @13 @14 15

REP G1 = (2-8) CH2

VAR G2=O/NH

VAR G3=8/10-6 11-2/13-6 14-2

REP G4 = (2-4) CH2

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

### GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L57	703	SEA	FILE=REGISTRY SSS FUL	L L3 AND	L54
L58	13	SEA	FILE=REGISTRY ABB=ON	PLU=ON	L57 AND L44
L59	2	SEA	FILE=REGISTRY ABB=ON	PLU=ON	L58 AND NC=2
L60	668	SEA	FILE=REGISTRY ABB=ON	PLU=ON	L57 NOT IDS/CI
L61	310	SEA	FILE=REGISTRY ABB=ON	PLU=ON	L60 AND NC=1
L62	2	SEA	FILE=HCAPLUS ABB=ON	PLU=ON	(L59 OR L61) (L) PROTEIN
L68	20	SEA	FILE=REGISTRY ABB=ON	PLU=ON	L17 OR L25 OR L28 OR L31 OR
		L53			
L69	25	SEA	FILE=HCAPLUS ABB=ON	PLU=ON	L68
L70	2	SEA	FILE=HCAPLUS ABB=ON	PLU=ON	(L59 OR L62)(L)PROTEIN
L71	27	SEA	FILE=HCAPLUS ABB=ON	PLU=ON	L69 OR L70

### => d 171 ibib abs hitind hitstr 1-27

L71 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1060830 HCAPLUS

DOCUMENT NUMBER: 142:38753

TITLE: Water-soluble polymers containing protected vicinial

diols

INVENTOR(S): Fox, Martin Edward; Appell, Robert Bruce

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

### PATENT INFORMATION:

PATENT NO.			KIND		DATE		APPLICATION NO.				DATE						
	<b></b>				-									-			
US 2004	2491	19		A1		2004	1209	•	US 2	003-	4555	24		20030605			
US 2004	2490	67		A1 20041209			•	US 2	004-	8593	85		20040602				
WO 2005	WO 2005000941			<b>A</b> 1	A1 20050106			1	WO 2	004-1		20040602					
WO 2005000941				C1 20050310													
W :	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	
	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	ΤZ,	ÜĠ,	ZM,	ZW,	AM,	
	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΊE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
	SN,	TD,	TG														

PRIORITY APPLN. INFO.:

US 2003-455524 A2 20030605

AB The invention comprises a linear or branched polymer derivative comprising a water soluble and non-peptidic polymer backbone that incorporates an optionally protected vicinal diol, which is either embedded in the polymer backbone or is attached as a pendant group, wherein each linking group (linker) between the polymer backbone and the vicinal diol is a chain comprising at least two saturated carbon atoms. The invention further comprises a method of using the polymer derivative to form an aldehyde and either a second aldehyde or a ketone by way of oxidative cleavage.

IC ICM C08G065-32

INCL 528480000; 525061000; 525326100; 525403000

CC 35-8 (Chemistry of Synthetic High Polymers)

IT 161927-25-9P 804564-43-0P 804564-44-1P 804564-46-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(water-soluble polymers containing protected vicinial diols)

IT 804564-46-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(water-soluble polymers containing protected vicinial diols)

RN 804564-46-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(3,4-dihydroxybutyl)- $\omega$ -methoxy-(9CI) (CA INDEX NAME)

MeO 
$$CH_2$$
  $CH_2$   $CH_$ 

L71 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:1060811 HCAPLUS

DOCUMENT NUMBER: TITLE:

Linear or branched methoxypolyethylene glycol polymer derivatives for forming aldehydes or ketones and their

preparation

142:38751

INVENTOR (S):

Fox, Martin Edward; Appell, Robert Bruce; Cantrill,

Alexander Allan

PATENT ASSIGNEE(S):

UK

SOURCE:

U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S.

Ser. No. 455,524.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004249067	A1	20041209	US 2004-859385	20040602
US 2004249119	A1	20041209	US 2003-455524	20030605
PRIORITY APPLN. INFO.:			US 2003-455524	A2 20030605
AR The polymer deriva	tive cor	mprises a wa	ter soluble and non-	peptidic polyme

The polymer derivative comprises a water soluble and non-peptidic polymer backbone incorporating an optionally protected vicinal diol, which is either embedded in the polymer backbone or is attached as a pendant group, wherein each linking group (linker) between the polymer backbone and the vicinal diol is a chain comprising ≥2 adjacent saturated carbon atoms. Polymer derivative is used for forming an aldehyde and either a second aldehyde or a ketone by way of oxidative cleavage.

ICM C08G083-00

INCL 525056000; 525326100; 525326700; 525326800; 525383000; 525403000

35-8 (Chemistry of Synthetic High Polymers)

804564-43-0P 804564-44-1P 804564-45-2P 804564-46-3P

804564-47-4P 804564-48-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of linear or branched methoxypolyethylene glycol polymer derivs. for forming aldehydes or ketones)

IT 804564-46-3P

> RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of linear or branched methoxypolyethylene glycol polymer derivs. for forming aldehydes or ketones)

RN 804564-46-3 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -(3,4-dihydroxybutyl)- $\omega$ -methoxy-CN (9CI) (CA INDEX NAME)

L71 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:609952 HCAPLUS

DOCUMENT NUMBER:

141:157893

TITLE:

Novel monofunctional polyethylene glycol aldehydes

useful for pegylation

INVENTOR (S):

Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 661,268.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004147687	A1	20040729	US 2003-715607		20031118
KR 2003048293	A	20030619	KR 2001-78244		20011211
US 2003153694	A1	20030814	US 2002-303260		20021125
US 2004034188	A1	20040219	US 2003-431294		20030507
US 6916962	B2	20050712			
US 2004122164	A1	20040624	US 2003-661268		20030912
PRIORITY APPLN. INFO.:			KR 2001-78244	Α	20011211
			US 2002-348452P	P	20020116
			US 2002-381503P	P	20020517
·			US 2002-407741P	P	20020903
			US 2002-303260	Α2	20021125
			US 2003-431294	A2	20030507
			US 2003-661268	Α2	20030912

AB The present invention provides novel monofunctional polyethylene glycol aldehydes for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such aldehydes are described.

IC. ICM C08G065-32

INCL 525389000; 525403000

CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 63

T79-10-7DP, Acrylic acid, addition products with methoxypolyethylene glycol, ester with hydroxysuccinimide, amide derivative, urethane propionaldehyde 6066-82-6DP, N-Hydroxysuccinimide, ester with methoxypolyethylene glycol acrylic acid addition product, amide derivative, urethane propionaldehyde 9004-74-4DP, Methoxypolyethylene glycol, addition products with acrylic acid, ester with hydroxysuccinimide, amide derivative, urethane propionaldehyde 41365-75-7DP, displacement reaction products with hydroxysuccinimide esterified methoxypolyethylene glycol acrylic acid addition product, deacetalized compound 533881-58-2P 544706-95-8P

544706-97-0P 544706-99-2P 544707-02-0P

544707-05-3P 544708-06-7P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

IT 544706-95-8P 544706-97-0P 544707-02-0P

544707-05-3P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-95-8 HCAPLUS

CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
 - NH- C-  $CH_2$ -  $CH_2$ - O-  $CH_2$ -  $CH_2$ -  $CH_2$ -  $OH_2$ -

RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[(4-oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-O- $C$ -NH- $CH_2$ - $CH_2$ -O- $CH_2$ - $CH_2$ -O- $CH_2$ - $CH_2$ -O- $CH_2$ - $CH_2$ -O- $CH_2$ - $CH$ 

L71 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:513373 HCAPLUS

DOCUMENT NUMBER:

141:72062

TITLE:

monofunctional polyethylene glycol aldehydes,

preparation and protein conjugate

INVENTOR(S):

Rosen, Perry; Nho, Kwang H.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.

Pat. Appl. 2004 34,188.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122164	A1	20040624	US 2003-661268	20030912
KR 2003048293	Α	20030619	KR 2001-78244	20011211
US 2003153694	A1	20030814	US 2002-303260	20021125
US 2004034188	A1	20040219	US 2003-431294	20030507
US 6916962	B2	20050712		
US 2004147687	A1	20040729	US 2003-715607	20031118
PRIORITY APPLN. INFO.:			KR 2001-78244 A	20011211
		•	US 2002-303260 A2	2 20021125

US 2003-431294 A2 20030507 US 2002-348452P P 20020116 US 2002-381503P P 20020517 US 2002-407741P P 20020903 US 2003-661268 A2 20030912

AB The monofunctional polyethylene glycol aldehydes are used for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived.

IC ICM C08G065-00

ICS C08G063-48; C08G063-91

INCL 525054100; 528230000; 525526000

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 63

IT 112344-11-3DP, Acrylic acid-ethylene oxide graft copolymer, reaction products with hydroxysuccinimide, aminodiethoxypropane, and aldehyde formation 533881-58-2P 544706-95-8P 544706-97-0P 544706-99-2P 544707-02-0P 544707-05-3P 544708-06-7P RL: IMF (Industrial manufacture); PREP (Preparation)

(polyethylene glycol aldehydes for conjugates with proteins)

IT 544706-95-8P 544706-97-0P 544707-02-0P

544707-05-3P

RL: IMF (Industrial manufacture); PREP (Preparation) (polyethylene glycol aldehydes for conjugates with proteins)

RN 544706-95-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ - $CH_2$ - $OH_2$ - $CH_2$ - $CH_2$ - $OH_2$ -

RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

RN . 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-methyl-ω-[2-[[(4oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

L71 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:493467 HCAPLUS

DOCUMENT NUMBER: 141:59665

ETEL D. D. Franking T.

TITLE: Bifunctional polyethylene glycol derivatives

INVENTOR(S):
Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 52 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ \_ \_ \_ \_ \_\_\_\_\_ \_\_\_\_\_\_ US 2004115165 **A**1 20040617 US 2003-721013 20031121 PRIORITY APPLN. INFO.: US 2002-428809P P 20021125 The present invention provides novel heterobifunctional and monobifunctional polyethylene glycol derivs. for the pegylation of therapeutically active proteins. The heterobifunctional PEGs which bear two different functional groups as well as the monobifunctional PEGs which contain two similar functional groups, may be used for crosslinking purposes. The crosslinking may be intramol. between two areas within the same mol. or intermol. between two sep. mols. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such bifunctional derivs. are described. IC ICM A61K031-765 ICS C08G059-14 INCL 424078380; 525523000 CC 63-5 (Pharmaceuticals) IT **650634-84-7P 705933-20-6P** 705933-21-7P 705933-22-8P 705933-23-9P 705933-24-0P 705933-25-1P 705933-26-2P 705933-27-3P 705933-28-4P RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (bifunctional polyethylene glycol derivs.) IT 650634-84-7P 705933-20-6P 705933-23-9P 705933-26-2P 705933-27-3P RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (bifunctional polyethylene glycol derivs.) RN 650634-84-7 HCAPLUS CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-oxo-2-[(3-oxopropyl)amino]ethyl]-

 $\omega$ -[2-0x0-2-[(3-0x0propyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

$$\text{OHC-} \ \text{CH}_2 - \text{CH}_2 - \text{NH-} \ \text{C--} \ \text{CH}_2 - \text{CH}$$

PAGE 1-B

— сн<sub>2</sub>— сно

RN 705933-20-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-oxo-3-[(4-oxobutyl)amino]propyl]- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ - $CH_2$ -

PAGE 1-B

- ин- (СН<sub>2</sub>)  $_3$  - СНО

RN 705933-23-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino] ethyl]- $\omega$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$CH_2$$
-  $CH_2$ -  $NH$ -  $CH_2$ -  $C$ 

PAGE 1-B

RN 705933-26-2 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-CNyl)ethyl]- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX

$$CH_2 - CH_2 -$$

705933-27-3 HCAPLUS RN

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[[(4-oxobutyl)amino]carbonyl]- $\omega$ -[2-[[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

$$(CH_2)_5 - C - NH - CH_2 - CH_2 - O - CH_2 - CH_2 - O - NH - CH_2$$

PAGE 1-B

-- (CH<sub>2</sub>)<sub>3</sub> - CHO

L71 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:142840 HCAPLUS

DOCUMENT NUMBER:

140:181998

TITLE:

Novel monofunctional polyethylene glycol aldehydes

INVENTOR (S): Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S):

Sun Bio, Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S.

Ser. No. 303,260. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004034188	A1	20040219	US 2003-431294	20030507
US 6916962	B2	20050712		

```
KR 2003048293
                                20030619
                          Α
                                             KR 2001-78244
                                                                    20011211
     US 2003153694
                          A1
                                20030814
                                            US 2002-303260
                                                                    20021125
     US 2004122164
                          A1
                                20040624
                                             US 2003-661268
                                                                    20030912
     US 2004147687
                          Α1
                                20040729
                                             US 2003-715607
                                                                     20031118
PRIORITY APPLN. INFO.:
                                             KR 2001-78244
                                                                 Α
                                                                    20011211
                                             US 2002-348452P
                                                                 Р
                                                                    20020116
                                             US 2002-381503P
                                                                 P
                                                                    20020517
                                             US 2002-407741P
                                                                 P
                                                                    20020903
                                             US 2002-303260
                                                                 A2 20021125
                                             US 2003-431294
                                                                 A2 20030507
                                            US 2003-661268
                                                                 A2 20030912
```

AB The present invention provides novel monofunctional polyethylene glycol aldehydes for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such aldehydes are described.

IC ICM C08G065-00

INCL 528230000; 528250000

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 63

IT 544706-95-8P

RL: IMF (Industrial manufacture); PREP (Preparation)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

IT 314065-74-2DP, Acrylic acid-ethylene oxide graft copolymer methyl ether, ester with N-hydroxysuccinimide, displacement reaction products with 1-amino-4,4-dimethoxybutane, deacetalized compds. 533881-58-2P

544706-97-0P 544706-99-2P 544707-02-0P

544707-05-3P 544708-06-7P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

IT 544706-95-8P

RL: IMF (Industrial manufacture); PREP (Preparation)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-95-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

IT 544706-97-0P 544707-02-0P 544707-05-3P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediy1),  $\alpha$ -methyl- $\omega$ -[2-[[(4-oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-O-C-NH- $CH_2$ - $CH_2$ -O- $CH_2$ - $CH_$ 

L71 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:120875 HCAPLUS

DOCUMENT NUMBER:

140:187355

TITLE:

Preparation of PEGylated T1249 polypeptide conjugates

as antiviral agents

INVENTOR(S):

Bailon, Pascal Sebastian; Won, Chee-Youb

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE:

PCT Int. Appl., 61 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

I ANGUACE.

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PA	PATENT NO.				KIND DATE			APPLICATION NO.									
WO	2004	0131	65		A1										2	0030	716
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	ВŔ,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	ŢN,	TR,	TT,	$\mathrm{T}Z$ ,
		UA,	UG,	UΖ,	VN,	YU,	ZA,	ZM,	ZW		•						
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	ΤJ,	TM,	AΤ,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ.,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	2492	954			AA		2004	0212	1	CA 2	003-	2492	954		20030716		
EΡ	EP 1546193			A1		20050629		EP 2003-766191						20030716			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	ΝL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 2003-625103 US 2004171542 A1 20040902 20030722 PRIORITY APPLN. INFO.: US 2002-398190P Р 20020724 US 2003-439213P P 20030110 WO 2003-EP7711 W 20030716

- AB Pegylated T1249 polypeptide compds. are provided. Also provided are pharmaceutical compns. containing pegylated T1249 polypeptide compds., and processes of making. Further provided is the use of pharmaceutical composition comprising, in admixt. with a pharmaceutically acceptable excipient, a PEGylated T1249 polypeptide conjugate, for the preparation of a medicament for the inhibition of HIV infection. Propionaldehyde-PEG was reacted with T1249 to obtain propionaldehyde-PEG-T1249 conjugate. Antiviral efficacy of the conjugate was shown in rats.
- IC ICM C07K014-16

ICS A61K038-16; A61P031-18

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1

IT 125061-88-3DP, reaction with T1249 251562-00-2DP, T1249, conjugates with
polyethylene glycol derivs. 650634-82-5DP, reaction with T1249
650634-82-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of PEGylated T1249 polypeptide conjugates as antiviral agents)

IT 650634-82-5DP, reaction with T1249 650634-82-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of PEGylated T1249 polypeptide conjugates as antiviral agents)

- RN 650634-82-5 HCAPLUS
- CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ -O- $CH_2$ -CH<sub>2</sub>-CH<sub>2</sub>-O- $D$ n Me

RN 650634-82-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ -O- $CH_2$ -CH<sub>2</sub>-CH<sub>2</sub>-O- $D$ n

L71 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:120874 HCAPLUS

DOCUMENT NUMBER:

140:187354

TITLE:

Preparation of PEGylated T20 polypeptide conjugates as

antiviral agents

INVENTOR(S):

Bailon, Pascal Sebastian; Won, Chee-Youb

PATENT ASSIGNEE(S):

F. Hoffmann-La Roche AG, Switz.

SOURCE:

PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

```
PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
                                                                         DATE
     -----
                                   _____
                                                ______
                                             WO 2003-EP7710
     WO 2004013164
                           A1
                                   20040212
                                                                         20030716
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ,
              UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                   20040212
                                                CA 2003-2493534
     CA 2493534
                            AA
     EP 1527088
                            A1
                                   20050504
                                                EP 2003-766190
                                                                         20030716
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    ·US 2004049018
                                                US 2003-623873
                            A1
                                   20040311
                                                                          20030721
                                                US 2002-398195P
PRIORITY APPLN. INFO .:
                                                                         20020724
                                                                      W 20030716
                                                WO 2003-EP7710
     Pegylated T20 polypeptide compds. are provided. Also provided are
AB
     pharmaceutical compns. containing pegylated T20 polypeptide compds., and
     processes of making and using such compds. and compns.
     Propionaldehyde-PEG was reacted with T20 to obtain propionaldehyde-PEG-T20
     conjugate (I). The IC50 of I was 0.261 \mug/mL.
     ICM C07K014-16
ICS A61K038-16; A61P031-18
IC
CC
     63-5 (Pharmaceuticals)
     Section cross-reference(s): 1
     125061-88-3DP, reaction with T20 peptide 159519-65-0DP, T20, conjugates
IT
     with polyethylene glycol derivs. 650634-82-5DP, reaction with
     T20 peptide 650634-82-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
         (preparation of PEGylated T20 polypeptide conjugates as antiviral agents)
TT
     650634-82-5DP, reaction with T20 peptide 650634-82-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (preparation of PEGylated T20 polypeptide conjugates as antiviral agents)
     650634~82-5 HCAPLUS
RN
     Poly(oxy-1,2-ethanediyl), \alpha-methyl-\omega-[2-oxo-2-[(4-
CN
     oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)
```

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ -O- $CH_2$ -CH2-O- $D$ 

```
RN 650634-82-5 HCAPLUS
```

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH-C- $CH_2$ -O- $CH_2$ -CH2-CH2-O- $n$ 

L71 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:80370 HCAPLUS

DOCUMENT NUMBER: 140:128840

TITLE: Aldehyde derivatives of polyethylene glycol

DATE

INVENTOR(S): Won, Chee-youb

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp.

KIND

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

	PAICNI	NO.			KIND DATE									DATE			
	US 200 CA 249	3221	•		A1 AA		2004 2004	0129 0212		US 2 CA 2	003- 003-	6239 2493	78 221		2	0030 0030	716
	WO 200	40132	05		A1		2004	0212		WO 2	003-	EP77.	34		2	0030	716
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		ŬĠ,	UΖ,	VN,	YU,	ZA,	ZM,	ZW									
	RW	: GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
	•	KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	EP 153	9857			A1		2005	0615		EP 2	003-	7661	94		, 20	0030	716 .
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,									
PRIO	RITY AP	PLN.	INFO	. :						US 2							
										WO 2							
AB	Polyet	hylen	e gl	ycol	ald	ehyd	e co	mpds	. of	R(C	H2CH	20) n	CH2C1	H2XY	NH (CI	12) p	СНО
	(where	in R	= ca	ppin	g gr	oups	; X	= 0,	NH;	Y =	alk	ylen	ecarl	oony	1, ca	arbo	nyl,
	hydrox	yalky	lene	, am	ido 🤉	grou	p; n	= 1	0-10	,000	; an	d p	= 1-3	3) o:	r the	e li	ke are
	provid																
															ctio	n wi	th the
	pegyla	tion	of p	olyp	eptio	les	and (	othe:	r bi	omol	s. (	no da	ata)	•			
IC	ICM C	08G06	5-00														
INCL	525403	000;	5284	0500	0												
CC	35-8 (							gh Po	olym	ers)							
	Section																
IT	650634	-80-3	P 65	0634	-82-	5P 6	5063	4-83	-6P								
	650634		_														
	RL: IM																
	(ma	nufac	ture	of a	aldel	ıyde	der	ivs.	of	poly	ethy!	lene	gly	col)			

APPLICATION NO.

DATE

IT 650634-80-3P 650634-82-5P 650634-83-6P 650634-84-7P

RL: IMF (Industrial manufacture); PREP (Preparation) (manufacture of aldehyde derivs. of polyethylene glycol)

RN650634-80-3 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-oxo-2-[(4-oxobutyl)amino]ethyl]-CN  $\omega$ -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

— (CH<sub>2</sub>) <u>з</u> — СНО

RN650634-82-5 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(4-CNoxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

RN650634-83-6 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-[(4,4-diethoxybutyl)amino]-2-CNoxoethyl]  $-\omega$  - [2-oxo-2-[(4-oxobutyl)amino]ethoxy] - (9CI) (CA INDEX NAME)

PAGE 1-B

$$\begin{array}{c} \text{OEt} \\ | \\ - \text{(CH}_2)_3 - \text{CH} - \text{OEt} \end{array}$$

RN 650634-84-7 HCAPLUS

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-oxo-2-[(3-oxopropyl)amino]ethyl]-CN  $\omega$ -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A CH2-C-NH-CH2-

PAGE 1-B

- CH<sub>2</sub>-- CHO

L71 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:472355 HCAPLUS

DOCUMENT NUMBER:

139:53490

conjugates

TITLE:

Monofunctional polyethylene glycol aldehydes with various spacers, their preparation and protein

INVENTOR (S):

Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S):

SOURCE:

Sun Bio, Inc., USA PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

4

FAMILY ACC. NUM. COUNT:

PATENT	NO.	KIND DATE		APPLICATION NO.	DATE
WO 2003 WO 2003	049699 049699		20030619 20041229	WO 2002-US39434	20021209
·	CO, CR, CU, GM, HR, HU, LS, LT, LU, PL, PT, RO, UG, UZ, VN, GH, GM, KE, KG, KZ, MD,	CZ, DE, ID, IL, LV, MA, RU, SD, YU, ZA, LS, MW, RU, TJ,	DK, DM, IN; IS, MD, MG, SE, SG, ZM, ZW MZ, SD, TM, AT,	BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, JP, KE, KG, KP, KR, MK, MN, MW, MX, MZ, SK, SL, TJ, TM, TN, SL, SZ, TZ, UG, ZM, BE, BG, CH, CY, CZ,	GB, GD, GE, GH, KZ, LC, LK, LR, NO, NZ, OM, PH, TT, TT, UA, ZW, AM, AZ, BY, DE, DK, EE, ES,
	CF, CG, CI, 048293	CM, GA,	GN, GQ, 20030619	MC, NL, PT, SE, SI, GW, ML, MR, NE, SN, KR 2001-78244	TD, TG 20011211
	AT, BE, CH, IE, SI, LT,	DE, DK,	ES, FR,	EP 2002-792347 GB, GR, IT, LI, LU, CY, AL, TR, BG, CZ, KR 2001-78244	NL, SE, MC, PT, EE, SK
				US 2002-348452P US 2002-381503P US 2002-407741P WO 2002-US39434	P 20020517 P 20020903

AB Novel monofunctional polyethylene glycol aldehydes are for pegylating therapeutically active proteins to produce pegylated protein conjugates which retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived.

IC ICM A61K

CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 63

IT 112344-11-3DP, Acrylic acid-ethylene oxide graft copolymer, reaction products with hydroxysuccinimide, aminodiethoxypropane, and aldehyde formation 533881-58-2P 544706-95-8P 544706-97-0P

544706-99-2P **544707-02-0P 544707-05-3P** 544708-06-7P

RL: IMF (Industrial manufacture); PREP (Preparation)

(polyethylene glycol aldehydes with various spacers for conjugates with therapeutically active proteins)

IT 544706-95-8P 544706-97-0P 544707-02-0P 544707-05-3P

RL: IMF (Industrial manufacture); PREP (Preparation) (polyethylene glycol aldehydes with various spacers for conjugates with therapeutically active proteins)

RN 544706-95-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

OHC- 
$$(CH_2)_3$$
-NH- $C$ - $CH_2$ - $CH_2$ -O- $CH_2$ - $CH_$ 

RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

OHC-
$$CH_2$$
- $CH_2$ - $NH$ - $C$ - $NH$ - $CH_2$ - $CH_2$ - $O$ - $CH_2$ - $CH_2$ - $O$ - $D$ - $D$ 

RN 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-[[(4-oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

```
OHC- (CH_2)_3-O-C-NH-CH_2-CH_2-O-CH<sub>2</sub>-CH_2-O-Me
```

L71 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:888697 HCAPLUS

DOCUMENT NUMBER: 137:389143

TITLE: Complexes for transferring therapeutic proteins and

nucleic acids into an animal cell

INVENTOR(S):
Braun, Serge; Meyer, Olivier; Nazih, Abdesslame;

Heissler, Denis

PATENT ASSIGNEE(S): Transgene S.A., Fr.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
							_									-			
	WO	2002	0925	54		A1		2002	1121	1	WO 2	002-1	EP53	04		2	0020	514	
		₩:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
								MD,											
			ΡL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	
			.TJ,	TM															
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝĒ,	SN,	TD,	TG	
	CA	2447	548			AA 20021121			CA 2002-2447548						20020514				
	EΡ	1389	182			<b>A</b> 1		2004	0218	]	EP 20	002-	75092	24		2	0020	514	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
	JP	2004	5283	84		T2		2004	0916		JP 20	002-	5894	40		2	0020	514	
PRIOR	ITY	APP	LN.	INFO	. :					]	EP 20	001-4	4401	34		A 2	0010	515	
										1	JS 20	001-2	29318	38P		P 2	0010	525	
									Ţ	WO 20	002-1	EP530	04	1	W 2	0020	514		
										_									

OTHER SOURCE(S): MARPAT 137:389143

The present invention concerns new polar compds., complexes and compns. comprising them, wherein the compound comprises: (i) a polar headgroup spacer, (ii) at least 1 hydrophobic moiety, and (iii) at least 1 hydrophilic polymer, and wherein the head-group spacer is coupled to the hydrophobic moiety and to the hydrophilic polymer. A lipid was prepared by the reaction of PEG monomethyl ether with H2N(CH2)3N(BOC)(CH2)3N(BOC)(CH2)3N(BOC) (CH2)3N(BOC) (CH2)3N(B

IC ICM C07C271-20

ICS A61K048-00; C12N015-88

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 3, 23

IT 56-18-8 107-13-1, 2-Propenenitrile, reactions 156-87-6, 1-Amino-3-propanol 598-21-0, Bromoacetyl bromide 9004-74-4,

Polyethylene glycol monomethyl ether 24424-99-5, Di-tert-butyl 29655-46-7 61278-21-5 93790-78-4 475576-35-3 dicarbonate 475576-38-6 475576-39-7 475576-40-0 475576-36-4 475576-37-5

475576-41-1 475576-42-2 **475576-43-3** 

RL: RCT (Reactant); RACT (Reactant or reagent)

(in preparation of lipids containing PEG; complexes for transferring therapeutic

proteins and nucleic acids into animal cell)

475576-43-3 ΙT

RL: RCT (Reactant); RACT (Reactant or reagent)

(in preparation of lipids containing PEG; complexes for transferring therapeutic

proteins and nucleic acids into animal cell)

475576-43-3 HCAPLUS RN

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[(27S,38Z)-1,24,30-trioxo-27-[[(9Z)-1-CN oxo-9-octadecenyl]oxy]-29-oxa-2,6,10,14,18,22,25-heptaazaheptatetracont-38en-1-yl]-ω-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

= CH- (CH<sub>2</sub>)<sub>7</sub>- Me

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L71 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:496066 HCAPLUS

DOCUMENT NUMBER:

121:96066

TITLE:

Electrophotographic lithographic plate

INVENTOR(S):

Kato, Eiichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan

APPLICATION NO.

DATE

SOURCE:

Jpn. Kokai Tokkyo Koho, 80 pp.

CODEN: JKXXAF

DATE

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

KIND

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

	· · · · · · · · · · · · · · · · · · ·							
•								
	JP 05216294	A2	19930827	JP 1992-47658	19920204			
PRIC	RITY APPLN. INFO.:			JP 1992-47658	19920204			
AB	In the title lithoc	, plate	making using	g an electrophotog. pla	te possessing			
	≥ 1 photoconductor layers and a claimed surface layer, the latter							
	contains dispersion resin particles (L), the binder resin for the photoconductive layer contains ≥ 1 claimed binder resins (A), the latent image produced on the electrophotog, plate is developed with a							
	toner, and the photoconductive layer in the non-image-bearing regions is desensitized with a solution containing a hydrophilic compound (Pearson's							
	nucleophilic constant $\geq$ 5). L is obtained by dispersion polymerizing, in a nonaq. solvent, a monofunctional monomer containing $\geq$ 1 functional							
	groups selected from a formyl group and a group expressed by CH(OA1)(OA2)							
	[A1,A2 = hydrocarby]	l, or m	ay join toge	ether to form a ring],	with a			
	monofunctional mono	mer con	taining subs	stituents containing Si	and(or) F in the			
	presence of a solub	le disp	ersion-stabi	ilizing agent. A (weig	ht average mol.			
weic	~			3 3 1 1 1 1 1 1 1	<b>5</b>			
	•			-1 (4600) (5-14-14-14-14-14-14-14-14-14-14-14-14-14-	1 -0 11			

 $1 \times 103 - 2 \times 104$ ) contains the polymer component CHalCa2(CO2R) [a1,a2 = H, halo, CN, hydrocarbyl; R = hydrocarbyl] > 30% and a polymer component containing > 1 polar groups selected from PO3H2, SO3H, CO2H, P(O)(OH)R (R = hydrocarbyl, oxyhydrocarbyl), and cyclic acid anhydride-containing group, 0.5-15%.

IC ICM G03G013-28

ICS G03G005-05; G03G005-06; G03G005-147

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 152640-64-7P **152681-23-7P** 152681-24-8P 152681-27-1P

152725-78-5P 156440-91-4P

RL: PREP (Preparation)

(preparation of, as latex for lithog. platemaking)

IT 152681-23-7P

RL: PREP (Preparation)

(preparation of, as latex for lithog. platemaking)

RN 152681-23-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 61412-55-3 CMF C7 H6 F6 O2

$$F_2$$
CH-CF<sub>2</sub>-CF<sub>2</sub>-CH<sub>2</sub>-O-C-CH=CH<sub>2</sub>

CM 2

CRN 40660-67-1 CMF C6 H9 N O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{OHC-} \ \text{CH}_2 - \ \text{CH}_2 - \ \text{NH-} \ \text{C-} \ \text{CH} === \ \text{CH}_2 \\ \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

L71 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:496065 HCAPLUS

DOCUMENT NUMBER: 121:96065

TITLE: Electrophotographic lithographic platemaking

INVENTOR(S):
Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 83 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-					
J	P 05216292	A2	19930827	JP 1992-47652	19920204
PRIORI	TY APPLN. INFO.:			JP 1992-47652	19920204
				ted by producing a tor	ner image on a
1	ithog. blank (elec	trophot	og. plate) a	nd desensitizing the	
-	on-image-hearing r	agiong .	with a decem	ditiding dolution don't	taining a

non-image-bearing regions with a desensitizing solution containing a hydrophilic

compound having a Pearson's nucleophilic constant of ≥ 5.5, the lithog. blank possessing ≥ 1 photoconductor layers containing a binder resin(s)

(A) and a surface layer containing nonaq. system-dispersed resin particles

(L). L are nonaq. solution-dispersed resin particles obtained by polymerizing

≥ 1 types of monofunctional monomers containing a formyl group(s)

and(or) groups CH(OA1)(OA2) [a1, a2 = hydrocarbyl; may combine to form a

ring] with a monofunctional monomer containing Si and(or) F-containing

substituents in the presence of a soluble dispersion-stabilizing resin.

Resin A (weight average mol. weight 1x103-2x104) contains the polymer component

CHa1:Ca2(CO2R) [a1,a2 = H, halo, CN, hydrocarbyl; R = hydrocarbyl]

≥ 30%, and its polymer chain is terminated at 1 end by a polar

group selected from PO3H2, SO3H, CO2H, P(O)(OH)R (R = hydrocarbyl,

oxycarbohydryl), and a group containing cyclic acid anhydride.

IC ICM G03G013-28 ICS G03G005-05; G03G005-06; G03G005-147

```
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
IT
     79-41-4D, Methacrylic acid, fluoroalkyl ester, graft copolymers with
     methacrylates 97-90-5D, Ethyleneglycol dimethacrylate, fluorinated graft
     copolymers with methacrylates 106-91-2D, Glycidyl methacrylate,
     fluorinated graft copolymers with methacrylates 142-09-6D, Hexyl
     methacrylate, fluorinated graft copolymers with methacrylates
     139288-11-2D, fluorinated graft copolymers with methacrylates
                  152640-58-9
                                152640-60-3
                                              152640-61-4
     149234-56-0
                                                            152640-62-5
                                            152681-27-1
     152640-64-7 152681-23-7
                             152681-25-9
     152681-47-5, Acrolein-ethylene glycol dimethacrylate-glycidyl
     methacrylate-3,3,4,4,5,5-hexafluoropentyl methacrylate-hexyl methacrylate
     graft copolymer 152681-48-6 152725-66-1 152725-67-2
                                                               152725-68-3
                  152725-70-7
                                152725-78-5, Acrolein-acrylonitrile-
     152725-69-4
     2,2,3,3,4,4-hexafluorobutyl acrylate-methyl methacrylate graft copolymer
                  156562-56-0
                                156562-57-1
                                              156562-58-2
     156562-55-9
                                                            156562-59-3
                  156562-61-7
     156562-60-6
                                 156562-62-8
                                              156562-63-9
                                                             156562-64-0
     156562-65-1
                  156562-66-2
                                 156562-67-3
                                              156562-68-4
                                                             156562-69-5
                  156562-71-9
     156562-70-8
                                 156562-72-0
     RL: USES (Uses)
        (electrophotog, plate for lithog, platemaking surface layer containing)
IT
     152681-23-7
     RL: USES (Uses)
        (electrophotog. plate for lithog. platemaking surface layer containing)
     152681-23-7 HCAPLUS
RN
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with
CN
     2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-
     propenamide, graft (9CI) (CA INDEX NAME)
     CM
         1
         61412-55-3
     CMF C7 H6 F6 O2
F2CH-CF2-CF2-CH2-O-C-CH-CH2
     CM
    CRN
         40660-67-1
     CMF C6 H9 N O2
```

CM 3

CRN 80-62-6 CMF C5 H8 O2

L71 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:335000 HCAPLUS

DOCUMENT NUMBER: 120:335000

TITLE: Manufacture of lithographic master

Kato, Eiichi; Kasai, Kyosuke INVENTOR(S): PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05066579	A2	19930319	JP 1991-254154	19910906
PRIORITY APPLN. INFO.:			JP 1991-254154	19910906
A. M. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.				

The title lithog. master is obtained by producing a toner image on a AB claimed electrophotog. plate then desensitizing the areas not bearing the toner image with a hydrophilic solution having a Pearson nucleophilic constant value of ≥5.5. The electrophotog plate utilizes ≥1 photoconductor layer containing photoconductive ZnO particles, a spectral sensitizer dye, ≥1 claimed binder resin, and nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the above ZnO particles. The above resin (weight average mol. weight 1

+ 103-2 + 104) contains (≥30%) polymer component CHa1Ca2(CO2R3) [a1, a2 = H, halo, CN, hydrocarbyl; R3 = hydrocarbyl] and possesses at 1 end polar terminal groups selected from PO3H2, SO3H, CO2H, P(O)(OH)R1, etc. The above nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer, containing a formyl

group(s) and(or) CH(OA1)(OA2) [A1, A2 = hydrocarbyl or may join to form a ring], with a monofunctional monomer containing substituents containing F and (or)

Si in the presence of a soluble dispersion-stabilizing resin. electrophotog. plate possesses superior electrostatic and mech. characteristics even under severe use conditions and the lithog. master obtained also gives stain-free copies over an extended run.

IC ICM G03G005-05

ICS G03G005-05; G03G005-06; G03G005-08; G03G013-28

74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

79-41-4D, fluoroalkyl ester, graft copolymer with methacrylates, uses 97-90-5D, graft copolymer with methacrylates 106-91-2D, graft copolymer 142-09-6D, graft copolymer with methacrylates with methacrylates 139288-11-2D, graft copolymer with methacrylates 149265-77-0 152640-58-9 152640-60-3 152640-61-4 152681-23-7

152681-47-5 152681-48-6 152725-66-1 152725-67-2 152725-68-3 152725-70-7 152725-69-4 152725-71-8 152725-72-9 152725-73-0 152725-74-1 152725-76-3 152725-77-4 152725-78-5 153014-29-0 155313-62**-**5 155313-64-7 155313-63-6 155605-47-3 155605-48-4 155605-49-5 155605-50-8 155605-51-9 155605-52-0 155605-53-1 155605-54-2 155605-55-3 155605-56-4 155605-57-5 155605-58-6

RL: USES (Uses)

(latex from, electrophotog. lithog. plate from)

IT 152681-23-7

RL: USES (Uses)

(latex from, electrophotog. lithog. plate from)

RN 152681-23-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-

propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 61412-55-3 CMF C7 H6 F6 O2

$$F_2$$
CH $-$ CF $_2$  $-$ CF $_2$  $-$ CH $_2$  $-$ O $-$ C $-$ CH $\longrightarrow$ CH $_2$ 

CM 2

CRN 40660-67-1 CMF C6 H9 N O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

L71 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:284869 HCAPLUS

DOCUMENT NUMBER: 120:284869

TITLE: Manufacture of electrophotographic lithographic

printing plate

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

# PATENT INFORMATION:

CM

CRN 18151-85-4

```
KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     PATENT NO.
                         _ _ _ _
                                -----
                                            ______
     ______
     JP 04350670
                          A2
                                19921204
                                            JP 1991-123783
                                                                   19910528
                                            JP 1991-123783
                                                                   19910528
PRIORITY APPLN. INFO.:
     For an electrophotog. lithog. printing plate having ≥1
     photoconductive layer made up of a photoconductive ZnO grains and a binder
     resin on a conductive support, the manufacture comprises: effecting imagewise
     exposure to form a toner image on an electrophotog. photoreceptor containing
     ≥1 kind of non-aqueous dispersion resin particles with a diameter equal to
     or smaller than that of a maximum grain diameter of the photoconductive ZnO
     grains; and desensitizing the photoreceptor by using a solution containing a
     hydrophilic compound having Pearson's nucleophilic constant ≥5.5. Said
     dispersion stabilizing resin can be obtained by copolymg. a monofunctional
     monomer (A) containing ≥1 functional group represented by formyl and/or
     CH(OR1)(OR2) [R1,2 = hydrocarbon; R1 and R2 may form a cyclic organic
     residue] with a monofunctional monomer (B) having Si- and/or F-containing
     group.
IC
     ICM G03G013-26
     ICS B41N003-08; G03G005-05; G03G005-06
     74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
     Section cross-reference(s): 35
IT
     25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer, carboxy-terminated,
     ester with 2-hydroxyethyl methacrylate 145807-49-4P 147130-23-2P
     148878-95-9P
                   149072-21-9DP, reaction products with allylamine
     149093-90-3P
                   149234-63-9P
                                  149235-47-2P
                                                 149275-08-1P
                                                                 149368-81-0P
     149368-84-3P
                   149433-97-6P
                                  149433-98-7P
                                                  149433-99-8P
                                                                 149434-02-6P
     149434-09-3P
                   149434-10-6P
                                  149434-11-7P
                                                  149434-17-3P
                                                                 149434-38-8P
                                  150753-06-3P 150753-07-4P
     150752-98-0P
                   150752-99-1P
                                  150753-38-1P
                                                                 150771-43-0P
     150753-08-5P
                   150753-09-6P
                                                 150753-39-2P
                                  151543-44-1P
     151543-37-2P
                   151543-40-7P
                                                  151543-46-3P
     RL: PREP (Preparation)
        (preparation of, electrophotog. lithog. printing plate from)
IT
     150753-07-4P
     RL: PREP (Preparation)
        (preparation of, electrophotog, lithog, printing plate from)
     150753-07-4 HCAPLUS
RN
CN
     2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl
     2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate,
     N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl
     2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)
     CM
         40660-67-1
     CRN
         C6 H9 N O2
     CMF
OHC-CH_2-CH_2-NH-C-CH=CH_2
```

CMF C12 H26 O3 Si2

CM

CRN 142-09-6 CMF C10 H18 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me-} & (\text{CH}_2)_5 - \text{O-} \text{C-} \text{C-} \text{Me} \end{array}$$

CM

CRN 106-91-2 CMF C7 H10 O3

CM

CRN 97-90-5 CMF C10 H14 O4

HCAPLUS COPYRIGHT 2005 ACS on STN L71 ANSWER 16 OF 27

ACCESSION NUMBER:

1994:148984 HCAPLUS

DOCUMENT NUMBER:

120:148984

TITLE:

Manufacture of lithographic printing plate having

excellent water-retaining properties

INVENTOR(S):

Kato, Eiichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

#### PATENT INFORMATION:

IT

149698-52-2P

```
KIND
                               DATE
                                          APPLICATION NO.
     PATENT NO.
                                                                 DATE
     -----
                       . _ _ _ _
                               -----
                                           -----
                                                                 -----
                                          JP 1991-289414
     JP 05100504
                         A2
                               19930423
                                                                 19911009
PRIORITY APPLN. INFO.:
                                           JP 1991-289414
                                                                 19911009
    The manufacture of a lithog. printing plate, which has ≥1 photoconductor
     layer on a conductive support and an uppermost surface layer, comprises
     effecting imagewise exposure of the lithog. printing plate containing nonaq.
     dispersion resin particles in the surface layer and and a binder resin in
     the photosensitive layer to form a toner image and desensitizing nonimage
     regions of the photoconductor layer with a solution containing a hydrophilic
     compound having a Pearson's nucleophilic constant ≥5.5. The nonaq.
     dispersion resin particles are copolymer particles which are obtained by
     polymerizing in a nonaq. solvent a monofunctional monomer, which (soluble in
the
     solvent but becoming insol. upon polymerization) contains formyl and/or
     CH(OA1)(OA2) [A1,2 = hydrocarbyl, organic residues combing together to form a
     ring], in the presence of a dispersion stabilizing resin made up of a
     repeating unit containing Si- and/or F-bearing substituent and the binder
     resin with a weight-average mol. weight 1000-20,000 contains a repeating unit
     [CalHCa2(COOR1)] [a1,2 = H, halo, cyano, hydrocarbyl; R1 = hydrocarbyl]
     ≥30% and a polymer component 0.5-15% containing ≥1 kind of a
     polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R2 [R2 =
    hydrocarbyl, OR3; R3 = hydrocarbyl] and a group containing cyclic anhydride.
IC
     ICM G03G013-28
     ICS G03G005-05; G03G005-06; G03G005-147
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    65697-21-4P
                  65697-22-5P
                                126969-78-6P 130094-33-6P 130952-79-3P
    131808-63-4P
                  135740-18-0P
                                  135740-30-6P
                                                 135740-31-7P
                                                               135740-32-8P
    135740-33-9P
                   135740-35-1P
                                  135740-36-2P
                                                 135740-37-3P
                                                               135740-38-4P
    135740-39-5P
                   135740-41-9P
                                  135740-43-1P
                                                 135740-44-2P
                                                               135740-46-4P
    135770-63-7P
                   135820-62-1P
                                  139663-63-1P
                                                 142648-25-7P
                                                               145168-75-8P
    145168-89-4P
                   145168-94-1P
                                  145169-02-4P
                                                145169-03-5P
                                                               145169-04-6P
    145169-24-0P
                   145169-26-2P
                                  145169-30-8P
                                                145807-38-1P
                                                               145807-40-5P
                   145807-51-8P
    145807-41-6P
                                  145807-53-0P
                                                145807-54-1P
                                                               145807-55-2P
    145807-56-3P
                   145807-57-4P
                                  145807-63-2P
                                                145807-64-3P
                                                               145807-65-4P
    145807-66-5P
                   145807-68-7P
                                  145807-70-1P
                                                145807-71-2P
                                                               145807-72-3P
                                  146188-26-3DP, carboxy-terminated, ester
    145807-78-9P
                   145807-80-3P
    with 2-hydroxyethyl methacrylate 146817-57-4P
                                                    146817-58-5P
                                  147524-36-5P
    146817-61-0P
                   146966-35-0P
                                                147545-76-4P
                                                               149072-24-2DP,
    reaction product with 2-isocyanatoethyl methacrylate 149368-83-2P
                                  149434-21-9P
                                               149434-25-3P
    149368-85-4P
                  149434-15-1P
                                                               149434-28-6P
    149434-33-3P
                 149658-55-9P
                                  149698-33-9P
                                                149698-34-0P
                                                               149698-35-1P
    149698-37-3P
                 149698-38-4P
                                  149698-39-5P
                                                149698-40-8P
                                                               149698-42-0P
    149698-43-1P 149698-46-4P
                                  149698-47-5P 149698-48-6P
                                                               149698-49-7P
    149698-50-0P 149698-52-2P 149698-53-3P 149698-54-4P
    149698-55-5P 149698-56-6P
                                 149698-57-7P 149698-58-8P
                                                               149698-59-9P
                                                149729-07-7P
    149698-60-2P
                  149698-63-5P
                                  149729-05-5P
                                                               149729-28-2P
                 149729-31-7P
                                  149729-32-8P
    149729-30-6P
                                                149729-33-9P
                                                               149765-50-4P
    149934-66-7P
                  149962-75-4P 151864-21-0P
                                                152586-80-6P
                                                               152586-81-7DP,
    reaction product with acrylamide 153147-24-1P
    RL: TEM (Technical or engineered material use); PREP (Preparation); USES
       (preparation of, for lithog. printing plate preparation)
```

Searched by Paul Schulwitz 571-272-2527

RL: TEM (Technical or engineered material use); PREP (Preparation); USES

(Uses)

(preparation of, for lithog. printing plate preparation)

RN 149698-52-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl

2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

$$\begin{array}{c} \text{O} \\ || \\ \text{OHC-CH}_2\text{--CH}_2\text{--NH-C-CH} \end{array}$$

CM 2

CRN 15289-97-1 CMF C9 H18 O5 Si

$$^{\rm H_2C}$$
 O  $^{\rm OMe}$   $^{\rm ||}$   $^{\rm ||}$   $^{\rm ||}$   $^{\rm ||}$   $^{\rm ||}$  Me- C- C- O- CH\_2- CH\_2- Si- OMe  $^{\rm ||}$  OMe

CM

CRN 97-90-5 CMF C10 H14 O4

L71 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:148983 HCAPLUS

DOCUMENT NUMBER:

120:148983

TITLE:

SOURCE:

Manufacture of electrophotographic lithographic printing plate having excellent water retention

INVENTOR(S):

Kato, Eiichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 84 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

```
KIND
     PATENT NO.
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                                            -----
                                                                   _____
     JP 05100503
                          Α2
                                19930423
                                            JP 1991-289413
                                                                   19911009
PRIORITY APPLN. INFO.:
                                            JP 1991-289413
                                                                   19911009
     The manufacture of a lithog. printing plate, which has \geq 1 photoconductor
     layer on a conductive support and an uppermost surface layer, comprises
     effecting imagewise exposure of the lithog. printing plate containing nonaq.
     dispersion resin particles in the surface layer and a binder resin in the
     photosensitive layer to form a toner image and desensitizing nonimage
     regions of the photoconductor layer with a solution containing a hydrophilic
     compound having a Pearson's nucleophilic constant ≥5.5. The nonaq.
     dispersion resin particles are copolymer particles which are obtained by
     polymerizing in a nonaq. solvent a monofunctional monomer, which (soluble in
the
     solvent but becoming insol. upon polymerization) contains formyl and/or
     CH(OA1)(OA2) [A1,2 = hydrocarbyl, organic residues combing together to form a
     ring], in the presence of a dispersion stabilizing resin made up of a
     repeating unit containing Si- and/or F-bearing substituent. The binder resin
     with a weight-average mol. weight 1000-20,000 contains a repeating unit
     [CalHCa2(COOR1)] [a1,2 = H, halo, cyano, hydrocarbyl; R1 = hydrocarbyl]
     ≥30% and terminated, on one end of the backbone chain, with a polar
     moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R2 [R2 = hydrocarbyl,
     OR3; R3 = hydrocarbyl] and a group containing cyclic anhydride.
IC
     ICM
         G03G013-28
     ICS B41N003-08; G03G005-147
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
IT
     128338-04-5P
                    128338-05-6P
                                   138059-23-1P
                                                  138059-26-4P
                                                                 138059-27-5P
     138059-28-6P
                    138059-29-7P
                                   138059-30-0P
                                                  138059-31-1P
                                                                 138059-32-2P
     138059-33-3P
                    138059-34-4P
                                   138059-35-5P
                                                  138059-36-6P
                                                                 139357-81-6P
    139989-86-9P
                    139989-94-9P
                                   142199-53-9P
                                                  145168-75-8P
                                                                 145168-89-4P
     145168-94-1P
                    145169-02-4P
                                   145169-03-5P
                                                  145169-04-6P
                                                                 145169-24-0P
     145169-26-2P
                    145169-30-8P
                                   145807-38-1P
                                                  145807-40-5P
                                                                 145807-41-6P
     145807-51-8P
                    145807-53-0P
                                   145807-54-1P
                                                  145807-55-2P
                                                                 145807-56-3P
     145807-57-4P
                    145807-63-2P
                                   145807-64-3P
                                                  145807-65-4P
                                                                 145807-66-5P
     145807-68-7P
                    145807-70-1P
                                   145807-71-2P
                                                  145807-72-3P
                                                                 145807-78-9P
     145807-80-3P
                                   146188-26-3DP, carboxy-terminated, ester
                    146115-83-5P
     with 2-hydroxyethyl methacrylate 146716-90-7P
                                                     146716-92-9P
     146716-99-6P
                    146717-07-9P
                                   146966-35-0P
                                                 147545~76-4P
                                                                 149072-24-2DP,
     reaction product with isocyanatoethyl methacrylate
                                                         149295-28-3P
     149368-83-2P
                  149368-85-4P
                                   149434-15-1P
                                                 149434-21-9P
                                                                 149434-25-3P
     149434-28-6P
                  149434-33-3P
                                   149658-55-9P
                                                 149698-33-9P
                                                                 149698-34-0P
     149698-35-1P 149698-37-3P
                                   149698-38-4P
                                                 149698-39-5P
                                                                149698-40-8P
     149698-42-0P 149698-43-1P 149698-46-4P
                                                 149698-47-5P
                                                                149698-48-6P
                  149698-50-0P 149698-52-2P 149698-53-3P
     149698-49-7P
                                  149698-56-6P 149698-57-7P
     149698-54-4P
                  149698-55-5P
                                                                149698-58-8P
     149698-59-9P
                   149698-60-2P
                                  149698-63-5P
                                                 149729-05-5P
                                                                149729-07-7P
     149729-28-2P
                   149729-30-6P
                                  149729-31-7P
                                                 149729~32-8P
                                                                149729-33-9P
     149765-50-4P
                   149934-66-7P
                                  149962-75-4P
                                                151864-21-0P
                                                                152586-80-6P
     152586-81-7DP, reaction product with acrylamide 153147-24-1P
     RL: TEM (Technical or engineered material use); PREP (Preparation); USES
        (preparation of, for lithog. printing plate preparation)
     149698-52-2P
TΤ
     RL: TEM (Technical or engineered material use); PREP (Preparation); USES
        (preparation of, for lithog. printing plate preparation)
RN
     149698-52-2 HCAPLUS
     2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
CN
```

N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

$$\begin{array}{c|c} \cdot & \circ \\ \parallel \\ \text{OHC-} \ \text{CH}_2 - \text{CH}_2 - \text{NH-} \ \text{C-} \ \text{CH} = = \text{CH}_2 \\ \end{array}$$

CM 2

CRN 15289-97-1 CMF C9 H18 O5 Si

$$\begin{array}{c|c} ^{\rm H_2C} & {\rm O} & {\rm OMe} \\ || & || & || \\ {\rm Me^-\,C^-\,C^-\,O^-\,CH_2^-\,CH_2^-\,Si^-\,OMe} \\ | & {\rm OMe} \end{array}$$

CM 3

CRN 97-90-5 CMF C10 H14 O4

L71 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:148980 HCAPLUS

DOCUMENT NUMBER:

120:148980

TITLE:

 ${\tt Manufacture\ of\ lithographic\ plate\ from}$ 

electrophotographic photoreceptor

INVENTOR(S):
PATENT ASSIGNEE(S):

Kato, Elichi; Kasai, Kyosuke Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 87 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05061214	A2	19930312	JP 1991-250310	19910904
PRIORITY APPLN. INFO.:			JP 1991-250310	19910904

Witherspoon 10/715,607 07/22/2005 The manufacture of a lithog. plate from an electrophotog: photoreceptor, which AB has ≥1 photosensitive layer containing at least photoconductive ZnO grains, a spectral sensitizing dye, and a binder resin on a conductive support, comprises effecting imagewise exposure of the electrophotog. photoreceptor containing the binder resin in the photosensitive layer and ≥1 kind of nonaq. dispersion resin grains having the average grain diameter equal to or smaller than that of the maximum grain diameter of the ZnO grains to form a toner image and effecting desensitization process of nonimage regions by using a solution containing a hydrophilic compound with Pearson's nucleophilic constant ≥5.5;. The binder resin, with weight average mol. weight 1000-20,000, has a repeating unit [CHa1Ca2COOR1] [a1,2 = H, halo, cyano, hydrocarbyl; R1 = hydrocarbyl] as a polymer component ≥30% and another polymer component 0.5-15% containing ≥1 polar moiety selected from PO3H2, SO3H, COOH, and P(:O)(OH)R2 [R2 = hydrocarbyl or OR3; R3 = hydrocarbyl] and a moiety containing a cyclic anhydride group. The nonaq. dispersion resin grains are made of a copolymer obtained through dispersion polymerization of a monofunctional monomer, which contains formyl and/or CH(OA1)(OA2) [A1,2 = hydrocarbyl] and is soluble in the nonag. solvent but becoming insol. upon polymerization, with a monofunctional monomer containing Si and/or F. G03G005-05 IC ICMG03G005-05; G03G005-06; G03G005-08; G03G013-28 ICS CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) IT 25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 52229-66-0P 65697-21-4P 65697-22-5P 126969-78-6P 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P 135770-63-7P 135820-62-1P 139645-92-4P 139663-63-1P 142648-25-7P 145807-49-4P 146817-57-4P 146817-58-5P 146817-61-0P 147130-23-2P . 147524-36-5P 149072-21-9DP, reaction product with allylamine 149093-90-3DP, reaction product with isocyanoethyl methacrylate 149234-56-0P 149234-57-1P

149234-58-2P 149234-59-3P 149234-60-6P 149234-61-7P 149234-63-9DP, reaction product with 2-isocyanatoethyl methacrylate 149235-47-2P 149235-75-6P 149265-77-0P 149295-65-8P 149295-66-9P 149295-67-0P 149368-81-0P 149368-84-3P 149433-97-6P 149433-98-7P 149433-99-8P 149434-02-6P 149434-04-8P 149434-06-0P 149434-09-3P 149434-10-6P 149434-11-7P 149434-17-3P 149434-22-0P 149434-38-8P 152640-58-9P 152640-60-3P 152640-61-4P 152640-62-5P 152640-64-7P 152681-23-7P 152681-24-8P 152681-25-9P 152681-27-1P 152681-47-5P 152681-48-6P 152725-66-1P 152725-67-2P 152725-68-3P 152725-69-4P 152725-70-7P 152725-71-8P 152725-72-9P 152725-73-0P 152725-75-2P 152725-74-1P 152725-76-3P 152725-77-4P 152725-78-5P 153014-29-0P RL: PREP (Preparation)

(preparation of, for electrophotog. photoreceptor for lithog. plate preparation)

152681-23-7P IT

RL: PREP (Preparation)

(preparation of, for electrophotog. photoreceptor for lithog. plate preparation)

RN152681-23-7 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2propenamide, graft (9CI) (CA INDEX NAME)

CM

CRN 61412-55-3 CMF C7 H6 F6 O2

2 CM

40660-67-1 CRN CMF C6 H9 N O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{OHC-CH}_2\text{--CH}_2\text{--NH-C-CH} \end{array}$$

CM

CRN 80-62-6 CMF C5 H8 O2

HCAPLUS COPYRIGHT 2005 ACS on STN L71 ANSWER 19 OF 27

ACCESSION NUMBER:

1994:41999 HCAPLUS

DOCUMENT NUMBER:

120:41999

TITLE:

Electrophotographic lithographic printing plate giving

high sensitivity to semiconductor laser scanning

method

INVENTOR(S):

Kato, Eiichi; Kasai, Kyosuke Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 84 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
JP 05034949	A2	19930212	JP	1991-213049	19910731
PRIORITY APPLN. INFO.:			JP	1991-213049	19910731
777 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 2 4 1				7

In an electrophotog. lithog. plate having ≥1 photoconductor layer AB containing photoconductive ZnO grains, a spectral sensitizing dye and a binder resin with the photoconductor layer containing ≥1 following binder resin (A) and  $\geq 1$  kind of nonaq. dispersion resin particles (L)

whose average grain diameter is smaller than or equal to the maximum grain diameter of

the photoconductive ZnO particles, a toner image is formed on the photoreceptor by imagewise exposure following elec. charging, and nonimage regions of the photoconductor layer are desensitized with a hydrophilic compound-containing solution having Pearson's nucleophilic constant ≥5.5:. The binder resin (A) (weight average mol. weight 1,000-20,000) contains a repeating unit [a1HC-Ca2(COOR3)] [a1,2 = H, halo, cyano, hydrocarbon; R3 = hydrocarbon] as a polymer component ≥30% and further contains a polymer component 0.5-15% having ≥1 polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R1 [R1 = hydrocarbon, OR2; R2 = hydrocarbon], and group containing cyclic anhydride. The nonag. dispersion resin particles (L) are made of a copolymer obtained by dispersion polymerization of a monofunctional monomer (C) in the presence of a dispersion stabilizing resin, which, soluble in a nonaq. solvent, contains a repeating unit containing a moiety having Si and/or F, in which the monofunctional monomer (C), which, soluble in the nonaq. solvent but insol. upon polymerization, contains  $\geq 1$ functional group from formyl and/or HC(OA1)(OA2) [A1,2 = hydrocarbon; or may form a cyclic residue by combining together]. IC ICM G03G005-05 G03G005-05; G03G005-06; G03G005-08; G03G013-28 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes) IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P 130094-33-6P 131808-63-4P 135740-30-6P 130952-79-3P 135740~18-0P 135740-31-7P 135740-35-1P 135740-36-2P 135740-32-8P 135740-33-9P 135740-37-3P 135740-38-4P 135740-41-9P 135740-39-5P 135740-43-1P 135740-44-2P 135820-62-1P 139663-63-1P 135740-46-4P 135770-63-7P 142648-25-7P 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P 145169-03-5P 145169-30-8P 145169-04-6P 145169-24-0P 145807-38-1P 145807-40-5P 145807-53-0P 145807-54-1P 145807-55-2P 145807-51-8P 145807-56-3P 145807-62-1P 145807-63-2P 145807-64-3P 145807-65-4P 145807-66-5P 145807-68-7P 145807-70-1P 145807-71-2P 145807-72-3P 145807-78-9P 145807-80-3P 146188-26-3DP, carboxy-terminated, ester with 146817-57-4P 2-hydroxyethyl methacrylate 146817-58-5P 147524-36-5P 149072-24-2DP, reaction product with 2-isocyanatoethyl methacrylate 149368-83-2P 149434-25-3P 149434-15-1P 149368-85-4P 149434-28-6P 149434-33-3P 149698-39-5P 149658-55-9P 149698-40-8P 149698-42-0P 149698-43-1P 149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P 149698-51-1P **149698-52-2P** 149698-54-4P 149698-50-0P 149698-55-5P 149698-57-7P 149698-56-6P 149698-58-8P 149698-59-9P 149698-60-2P 149729-05-5P 149729-06-6P 149729-30-6P 149729-31-7P 149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P 150103-52-9P 150497-92-0P 151688-53-8P 151688-55-0P 151709-96-5P 151709-97-6P 151754-98-2P 151754-99-3P 151755-00-9P 151755-01-0P 151755-02-1P 151755-03-2P 151755-05-4P 151755-06-5P 151755-07-6P 151864-21-0P 152103-17-8P RL: PREP (Preparation) (preparation of, electrophotog. lithog. printing plate from)

IT 149698-52-2P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

RN149698-52-2 HCAPLUS

CN2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1 CRN 40660-67-1 CMF C6 H9 N O2

CM 2

CRN 15289-97-1 CMF C9 H18 O5 Si

$$^{\mathrm{H_2C}}$$
 O OMe  $^{\mathrm{OMe}}$   $^{\mathrm{Me}}$   $^{\mathrm{Me}}$   $^{\mathrm{CH_2-CH_2-Si-OMe}}$   $^{\mathrm{OMe}}$   $^{\mathrm{OMe}}$   $^{\mathrm{OMe}}$ 

CM 3

CRN 97-90-5 CMF C10 H14 O4

L71 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:19184 HCAPLUS

DOCUMENT NUMBER:

120:19184

TITLE:

Manufacture of electrophotographic plate for

lithographic platemaking

INVENTOR(S):
PATENT ASSIGNEE(S):

Kato, Eiichi; Kasai, Kyosuke Fuji Photo Film Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 50 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	·			
. JP 05002281	A2	19930108	JP 1991-154724	19910626
PRIORITY APPLN. INFO.:			JP 1991-154724	19910626

AB The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound of Pearson's nucleophilic constant ≥5.5. In the above electrophotog, plate obtained by coating an elec. conductive support

with ≥1 photoconductive layers containing photoconductive ZnO and a binder resin, and a surface layer, the surface layer contains nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the largest ZnO particles. The nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer (A containing formyl and/or a functional group CH(OA1)(OA2) [R1,2 = hydrocarbon group; R1 and R2 may form a ring], with a monofunctional monomer (B) containing Si and/or F-containing substituents in the presence of a soluble dispersion-stabilizing resin containing Si and/or F-containing substituents.

- IC ICM G03G005-147
  - ICS G03G013-28
- CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

- IT 150752-99-1P 150753-00-7P 150753-06-3P 150752-98-0P 150753-08-5P 150753-09-6P 150753-07-4P 150753-11-0P 150753-12-1P 150753-13-2P 150753-14-3P 150753-15-4P 150753-16-5P 150753-18-7P 150753-19-8P 150753-20-1P 150753-17-6P 150753-21-2P 150753-33-6P 150753-38-1P 150753-39-2P 150753-41-6P 150753-42-7P 150753-43-8P 150753-45-0P 150771-43-0P 151565-03-6P 151565-04-7P 151565-05-8P 151565-06-9P 151565-07-0P 151565-08-1P 151575-39-2P 151677-25-7P
  - RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

IT 150753-07-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

RN 150753-07-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{OHC-CH}_2\text{--CH}_2\text{--NH-C-CH} \end{array}$$

CM 2

CRN 18151-85-4 CMF C12 H26 O3 Si2

CRN 142-09-6 CMF C10 H18 O2

CM

CRN 106-91-2 CMF C7 H10 O3

CM 5

CRN 97-90-5 CMF C10 H14 O4

L71 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1993:637925 HCAPLUS

DOCUMENT NUMBER:

119:237925

TITLE:

Manufacture of electrophotographic master plate for

lithographic platemaking

INVENTOR(S):

Kato, Eiichi

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05002275	A2	19930108	JP 1991-154725	19910626
PRIORITY APPLN. INFO.:			JP 1991-154725	19910626

AB The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound of Pearson's nucleophilic constant ≥5.5. In the

above electrophotog. plate having an image-receiving layer on its elec. conductive support, the image-receiving layer contains nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the largest ZnO particles. The nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer (A containing formyl and/or a functional group CH(OA1)(OA2) [R1,2 = hydrocarbon group; R1 and R2 may form a ring], with a monofunctional monomer (B) containing Si and/or F-containing substituents in the presence of a soluble dispersion-stabilizing resin containing Si and/or F-containing substituents.

IC ICM G03G005-05

ICS B41N001-14; G03G005-06; G03G013-28

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT 150752-98-0P 150752-99-1P 150753-00-7P 150753-06-3P 150753-08-5P 150753-11-0P 150753-07-4P 150753-09-6P 150753-12-1P 150753-13-2P 150753-15-4P 150753-14-3P 150753-16-5P 150753-17-6P 150753-18-7P 150753-19-8P 150753-20-1P 150753-21-2P 150753-33-6P 150753-38-1P 150753-39-2P 150753-40-5P 150753-41-6P 150753-42-7P 150753-43-8P 150753-44-9P 150753-45-0P 150771-43-0P 150771-47-4P 150771-48-5P 150771-49-6P 150771-50-9P 150771-51-0P 150771-52-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

IT 150753-07-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

RN 150753-07-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

$$\begin{array}{c} \text{O} \\ || \\ \text{OHC- CH}_2\text{-- CH}_2\text{-- NH-- C-- CH} \end{array}$$

CM 2

CRN 18151-85-4 CMF C12 H26 O3 Si2

CRN 142-09-6 CMF C10 H18 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{Me- (CH}_2)_5 - \text{O- C- C- Me} \end{array}$$

. CM 4

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\text{O}}{ \underset{\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me}}{\text{Me}} }$$

CM 5

CRN 97-90-5 CMF C10 H14 O4

L71 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1993:570524 HCAPLUS

DOCUMENT NUMBER:

119:170524

TITLE:

Manufacture of lithographic master via

electrophotography

INVENTOR(S):

Kato, Eiichi; Kasai, Kyosuke

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 71 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04333054	A2	19921120	JP 1991-131622	19910508
PRIORITY APPLN. INFO.:			JP 1991-131622	19910508
an mi c .		· · · · · · · · · · · · · · · · · · ·		

AB The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound having Pearson's nucleophilic constant ≥5.5. In

```
the above electrophotog. plate obtained by coating at least an elec.
     conductive support with ≥1 photoconductive layers containing
     photoconductive ZnO particles, spectral sensitizing dyes and a binder
     resin, the photoconductive layer contains a binder resin (A) and nonaq.
     solvent-dispersed resin particles (L) of average particle size equal to or
     smaller than that of the largest ZnO particles. The above resin (A) (average
     mol. weight 1x103 - 2x104) contains polymer component CHalCa2CO2R (a1,2 = H,
     halo, CN, hydrocarbon group; R = hydrocarbon group) ≥30%, and
     ≥1 polar groups selected from PO3H2, SO3H, CO2H, P(O)(OH)R1 [R1 =
     hydrocarbon group, OR2 (R2 = hydrocarbon group)] and cyclic acid
     anhydride-containing group, are bonded to 1 end of the polymer main chain.
     The nonaq. solvent-dispersed resin particles are obtained by dispersion
     polymerizing a monofunctional monomer (C) containing formyl and/or a functional
     group CH(OA1)(OA2) [A1,2 = hydrocarbon group; A1 and A2 may form a ring],
     in the presence of a soluble dispersion-stabilizing resin containing
     structure-repeating units containing Si and/or F-containing substituents.
IC
     ICM G03G005-06
     ICS G03G005-05; G03G005-08; G03G013-28
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
IT
     146966-35-0P
                    149698-33-9P
                                   149698-34-0P
                                                  149698-35-1P
                                                                  149698-36-2P
     149698-37-3P
                    149698-38-4P
                                   149698-39-5P
                                                  149698-40-8P
                                                                  149698-42-0P
     149698-43-1P
                    149698-46-4P
                                   149698-47-5P
                                                                  149698-49-7P
                                                  149698-48-6P
     149698-50-0P
                    149698-51-1P 149698-52-2P
                                                149698-53-3P
     149698-54-4P
                    149698-55-5P
                                   149698-56-6P
                                                  149698-57-7P
                                                                  149698-58-8P
     149698-59-9P
                    149698-60-2P
                                   149698-62-4P
                                                  149698-63-5P
                                                                  149729-05-5P
     149729-06-6P
                    149729-07-7P
                                   149729-28-2P
                                                  149729-30-6P
                                                                  149729-31-7P
     149729-32-8P
                    149729-33-9P
                                   149765-50-4P
                                                  149934-66-7P
                                                                  149962-75-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and use of, latex, electrophotog. plate from)
IT
     149698-52-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and use of, latex, electrophotog. plate from)
RN
     149698-52-2 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
    N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl
    2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)
    CM
    CRN
         40660-67-1
         C6 H9 N O2
    CMF
```

```
онс-CH_2-CH_2-NH-C-CH==CH_2
```

CRN 15289-97-1 CMF C9 H18 O5 Si

$$^{\mathrm{H_2C}}$$
 O OMe  $^{\mathrm{||}}$   $^{\mathrm{||}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}$   $^{\mathrm{||}}$   $^{\mathrm{||}$   $^{\mathrm{||}}$   $^{\mathrm{||}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{||}}$   $^{\mathrm{|$ 

97-90-5 CRN CMF C10 H14 O4

$$^{\rm H_2C}$$
 O O  $^{\rm CH_2}$   $^{\rm H_2}$   $^{\rm H_2C}$   $^{\rm H_2}$   $^{$ 

L71 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1993:503120 HCAPLUS

DOCUMENT NUMBER:

119:103120

TITLE:

Properties controlling the diffusion and release of

water-soluble solutes from poly(ethylene oxide)

hydrogels. 1. Polymer composition

AUTHOR (S):

McNeill, Marion E.; Graham, Neil B.

Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, G1 CORPORATE SOURCE:

1XL, UK

SOURCE:

Journal of Biomaterials Science, Polymer Edition

(1993), 4(3), 305-22

CODEN: JBSEEA; ISSN: 0920-5063

DOCUMENT TYPE: LANGUAGE:

Journal English

This study examines the state of water-association with poly(ethylene oxide), as evidenced by diffusivity, in a series of crosslinked polyurethanes made from poly(ethylene glycols) of a range of mol. wts. As a subsidiary underpinning exercise the correlation of diffusivity with water content at relatively high levels of swelling (>45%) using a variety of semi-empirical equations was analyzed. Three water-soluble compds. with similar mol. wts. and which exhibit minimal interaction with the polymer, as shown by their partition coeffs., were chosen for this part of the research program. These were proxyphylline, morphine-HCl and caffeine. The best statistical correlations of the data were obtained for plots of: (a) diffusivity against weight percent water; and (b) log diffusivity against the reciprocal of the weight percent of water in the hydrogels. Proxyphylline results for the high levels of swelling compns. were augmented with data from lower swelling compns. and a clear break in the slope of diffusivity against percentage of water in the swollen hydrogel was obtained. This indicated a change in the nature of the diffusion at this point. The probability of this transition point corresponding to a change for diffusion through water bound as trihydrate to diffusion in free water is discussed.

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 36

IT 85699-32-7 149295-85-2

RL: BIOL (Biological study)

(crosslinked, hydrogels, water-soluble drugs diffusion and release from, polymer composition control of)

IT 149295-85-2

RL: BIOL (Biological study)

(crosslinked, hydrogels, water-soluble drugs diffusion and release from, polymer composition control of)

RN 149295-85-2 HCAPLUS

CN 1,2,6-Hexanetriol, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

CCI PMS

HO 
$$CH_2 - CH_2 - O$$
  $H$ 

CM 2

CRN 106-69-4 CMF C6 H14 O3

$$^{
m OH}_{
m |}$$
 HO- CH2- CH- (CH2)  $_4$  - OH

L71 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:125277 HCAPLUS

DOCUMENT NUMBER:

110:125277

TITLE:

Silver halide photographic materials with polyester

substrates having improved layer adhesion

INVENTOR(S):

Tachibana, Noriki; Nakagawa, Satoshi

PATENT ASSIGNEE(S):

Konica Co., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63218951	A2	19880912	JP 1987-52302	19870306
PRIORITY APPLN. INFO.:			JP 1987-52302	19870306

AB A polyester film base of a photog. material is undercoated with polymers reactive with gelatin. Thus, a corona-discharged PET film was coated with a composition containing 4.0 g copolymer obtained by polymerization of Bu acrylate 30,

CH2:CHCHNHCH2NHCO(CH2)2SO2CH2CH2Cl 40, and hydroxyethyl acrylate 30 parts followed by treatment with Et3N, 20 mg each of 2 kinds of surfactants, 30 mg hexamethylenebis ethyleneurea, and 2.0 g gelatin, dried, and then coated with a solution containing 1 g gelatin and 20 mg saponin. A

photosensitive printing plate was obtained by coating a Ag halide emulsion layer and a protective layer on these undercoat layers, and normally processed. A test of adhesion strength by lifting a squarely cut surface of the film with adhesive tape showed the effectiveness of the invention undercoat.

IC ICM G03C001-80

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 85899-15-6P **119485-23-3P** 

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and polymerization of, undercoatings for polyester photog.

film bases

IT 119485-23-3P

from)

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and polymerization of, undercoatings for polyester photog.

film bases

from)

RN 119485-23-3 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-hydroxyethyl 2-propenoate and N-(3-oxopropyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

CM 2

CRN 818-61-1 CMF C5 H8 O3

$$\begin{array}{c} \text{O} \\ || \\ \text{HO-CH}_2\text{-CH}_2\text{-O-C-CH} \end{array} \text{CH}_2$$

CM 3

CRN 140-88-5 CMF C5 H8 O2

L71 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:464175 HCAPLUS

DOCUMENT NUMBER: 109:64175

TITLE: Silver halide color photographic material containing

hardened top organopolysiloxane layer

INVENTOR(S): Tachibana, Noriki; Ueda, Eiichi; Kagawa, Nobuaki; Ota,

Hideo; Oi, Ichiro

PATENT ASSIGNEE(S):

Konica Co., Japan Jpn. Kokai Tokkyo Koho, 21 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62269139	A2	19871121	JP 1986-113287	19860516
JP 06019519	B4	19940316		
PRIORITY APPLN. INFO.:			JP 1986-113287	19860516
AD A helide color wheter meteorial compains a buddenhill a salled to				

A Ag halide color photog. material contains a hydrophilic colloid top layer containing an organopolysiloxane and hardened with an amine hardener. Even if the hydrophilic colloid layer contains a large amount of the organopolysiloxane, the transfer of the organopolysiloxane does not occur during the manufacture of the photog. material. Also, the properties of the photog. material are not affected by the addition of the organopolysiloxane.

IC ICM G03C001-76 ICS G03C001-30

74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes)

TΤ 85899-16-7 95528~55-5 81869-03-6 95528-57-7 115401-85-9

RL: USES (Uses)

(hardener, for silver halide color photog. material)

IT 115401-85-9

RL: USES (Uses)

(hardener, for silver halide color photog. material)

RN 115401-85-9 HCAPLUS

CN 2-Propenamide, N-(3-oxopropyl)-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1 CMF C6 H9 N O2

$$\stackrel{\text{O}}{\parallel}$$
 OHC—  $\text{CH}_2$ —  $\text{CH}_2$ —  $\text{NH}$ —  $\text{C}$ —  $\text{CH}$ 

CM 2

CRN 79-06-1 CMF C3 H5 N O

L71 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:562185 HCAPLUS

DOCUMENT NUMBER: 103:162185

TITLE: Brominated, chlorinated and hydroxylated surfactants

derived from oleyl chain: preparation and surface

properties

AUTHOR(S): Garti, N.; Aserin, A.

CORPORATE SOURCE: Sch. Appl. Sci. Technol., Hebrew Univ. Jerusalem,

Jerusalem, 91904, Israel

SOURCE: Journal of Dispersion Science and Technology (1985),

6(2), 175-91

CODEN: JDTEDS; ISSN: 0193-2691

DOCUMENT TYPE: Journal LANGUAGE: English

Bromination, chlorination and hydroxylation of the double bond in AΒ polyethylene glycol oleates and oleyl ethers and polyglycerol oleates were carried out. The products had higher sp. gr. and therefore can be used as weighting agents. Surface properties and the ability to emulsify water and oils did not change significantly. Phys. (sp. gr., viscosity, and refractive index) and surface properties (such as reduction of surface tension of water, critical micelle concentration (CMC), area per mol. at the liquid/air interface, efficiency and effectiveness were measured and compared to the corresponding unsatd. surfactants. The incorporated dibromo, dichloro, or dihydroxy groups diminish some of the surface properties of the surfactant, e.g. higher surface tension, higher CMC value, higher area per mol., and lower efficiency and effectiveness in comparison to the related unsatd. surfactants. This study confirmed early findings suggesting that oleyl ethoxylated surfactants behaved abnormally when compared to straight chain ethoxylated alcs. or acids or polyglycerol esters and that any derivatization in the hydrophobic chain would significantly alter surface properties.

CC 46-3 (Surface Active Agents and Detergents)

IT 9007-48-1DP, brominated 33940-98-6DP, brominated 90168-40-4P

98815-20-4P 98815-21-5P 98827-72-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and surface-active properties of)

IT 98815-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and surface-active properties of)

RN 98815-21-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(9,10-dihydroxyoctadecyl)- $\omega$ -hydroxy-(9CI) (CA INDEX NAME)

L71 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1978:548055 HCAPLUS

DOCUMENT NUMBER:

89:148055

TITLE:

Modification of proteins

INVENTOR (S):

Ogata, Nobuo; Ogawa, Hideaki; Watanabe, Kiyoshi

PATENT ASSIGNEE(S):

Idemitsu Kosan Co., Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 5 pp.

DOCUMENT TYPE:

CODEN: JAXXAD

DOCOMENT

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 53024227 B4 19780719 JP 1974-85210 19740726
PRIORITY APPLN. INFO.: JP 1974-85210 A 19740726

Proteins (10-40%) reacted with 60-90% NCO-terminated aliphatic polyurethanes to prepare fibrous materials. Thus, 4.75 g 1,4-butanediol was dissolved in 50 mL C6H5Cl at 90°, mixed with 80% of a solution of 10.39 g hexamethylene diisocyanate (I) in 20 mL C6H5Cl, heated at reflux for 10 min, mixed with the remaining I solution, and heated at reflux for 1.5 h to prepare a polymer solution, which was mixed (50 mL) with 75 mL Me2SO containing 2.83 g yeast protein and heated at 100° for 3.75 h to prepare 100% white fibrous material.

IC C08H001-00

CC 39-2 (Textiles)

IT **25035-42-1D**, reaction product with yeast **proteins** 25748-74-7D, reaction product with yeast proteins RL: USES (Uses)

(fibrous)

IT 25035-42-1D, reaction product with yeast proteins

RL: USES (Uses) (fibrous)

RN 25035-42-1 HCAPLUS

CN Poly(oxy-1,4-butanediyloxycarbonylimino-1,6-hexanediyliminocarbonyl) (9CI) (CA INDEX NAME)